

Name: _____

Agricultural Science I**Directions:**

Evaluate the student by checking the appropriate number or letter to indicate the degree of competency. The rating for each task should reflect **employability readiness** rather than the grades given in class.

Rating Scale:

- 3 Mastered** – can work independently with no supervision
2 Requires Supervision – can perform job completely with limited supervision
1 Not Mastered – requires instruction and close supervision
N No Exposure – no experience or knowledge in this area

NOTE: The code in parentheses is the competency identification number used in computerized management systems.

NOTE: All competencies involving safety require a Number 3 rating.

3	2	1	N	A. Careers I	Notes:
				1. Identify career opportunities in the agricultural industry (A001)	
				2. List and classify agricultural occupations by their job requirements and benefits (A002)	
				3. Match personal qualifications with appropriate occupations (A003)	
				Other:	

3	2	1	N	B. Leadership I (Leadership Duty A)	Notes:
				1. Plan a program of personal development (A001)	
				2. Describe the background and tradition of the FFA (A002)	
				3. Describe the opportunities provided by the FFA (A003)	
				4. Identify requirements for becoming a member of the FFA (A004)	
				5. Describe acceptable appearance and conduct of FFA members (A005)	
				6. Demonstrate skills needed for participation in meetings (A006)	
				Other:	

3	2	1	N	C. Developing an SAE Program (SAE Duty A)	Notes:
				1. List the benefits of a good SAE program (A001)	
				2. Identify SAE projects for each area within the community (A002)	
				3. Set goals for the SAE program (A003)	
				4. Select projects for the SAE program (A004)	
				Other:	

3	2	1	N	D. Using The Missouri Agricultural Record Book for Secondary Students (SAE Duty B)	Notes:
				1. Complete forms needed to open the Missouri Agricultural Record Book for Secondary Students (B001)	
				2. Complete a budget for the SAE program (B002)	

				3. Complete inventory and financial statement forms for the Missouri Agricultural Record Book for Secondary Students (B003)	
				4. Complete receipt and expenditure forms in the Missouri Agricultural Record Book for Secondary Students (B004)	
				5. Complete additional forms in the Missouri Agricultural Record Book for Secondary Students (B005)	
				Other:	

3	2	1	N	E. Introduction to Animal Reproduction	Notes:
				1. Explain the purpose of male reproductive parts and hormones (D007)	
				2. Explain the purpose of female reproductive parts and hormones (D008)	
				3. Explain the role of puberty and the estrous cycle in reproduction (D009)	
				4. Describe conception and gestation (D010)	
				5. Identify the important factors of parturition (D011)	
				6. Define the role of genetics in reproduction (D012)	
				7. Compare management practices for genetic improvement (D013)	
				Other:	

3	2	1	N	F. Introduction to Animal Nutrition	Notes:
				1. Describe the parts and functions of the monogastric digestive system (E005)	
				2. Describe the parts and functions of the ruminant digestive system (E006)	
				3. Identify the importance of maintaining the nutritional needs of the animal (E007)	
				4. Identify how the nutritional needs of animals may be met (E008)	
				5. Demonstrate the procedure for balancing a ration for crude protein (E009)	
				Other:	

3	2	1	N	G. Introduction to Beef Production	Notes:
				1. Describe the importance of the beef industry in Missouri (F006)	
				2. Identify the major beef breeds and their significance to the beef industry (F007)	
				3. Utilize available information to select beef cattle (F008)	
				4. Compare various beef production systems (F009)	
				5. Develop a herd health program (F010)	
				6. Identify management factors important to profitable beef production (F011)	
				7. Evaluate issues of concern to the beef industry (F012)	
				Other:	

3	2	1	N	H. Introduction to Swine Production	Notes:
				1. Describe the importance of the swine industry in Missouri and the United States (G005)	
				2. Identify the major swine breeds and their significance in the industry (G006)	
				3. Use available information to select swine (G007)	
				4. Compare various production systems (G008)	
				5. Develop a herd health program (G009)	
				6. Identify management factors important to profitable hog production (G010)	
				7. Assess issues concerning the swine industry (G011)	
				Other:	

3	2	1	N	I. Sheep Production	Notes:
				1. Describe enterprises in sheep production	
				2. Outline the decisions used for selection of sheep	
				3. Identify management practices for sheep	
				4. Explain procedures required in managing a breeding flock	
				5. Describe strategies of sheep management that will most likely result in a profit	
				Other:	

3	2	1	N	J. Introduction to Dairy Production	Notes:
				1. Describe the importance of the dairy industry in Missouri (I006)	
				2. Identify the major dairy breeds in Missouri and their significance to the dairy industry (I007)	
				3. Use available information to select dairy cattle (I008)	
				4. List management factors important to profitable dairy production (I009)	
				5. Develop a herd health program (I003)	
				6. Evaluate issues concerning the dairy industry (I010)	
				Other:	

3	2	1	N	K. Poultry	Notes:
				1. Describe the importance of the poultry industry in Missouri (J001)	
				2. Select and evaluate poultry (J002)	
				3. Describe poultry production and management systems (J007)	
				4. Explain poultry reproductive processes (J008)	
				5. Identify poultry flock health issues (J009)	

				6. Identify procedures involved in processing poultry products (J010)	
				Other:	

3	2	1	N	L. Introduction to Agribusiness	Notes:
				1. Describe the role of agricultural businesses in the economy	
				2. Assess career opportunities available in agricultural business	
				3. Outline personal skills necessary for success in agricultural businesses	
				4. Illustrate economic principles of successful agricultural businesses	
				5. Determine business activities used in agricultural businesses	
				Other:	

3	2	1	N	M. Entomology	Notes:
				1. Discuss the significance of entomology (b001)	
				2. Prepare an insect collection (b002)	
				3. Describe the procedure for classifying insects to order (b003)	
				4. Describe methods of pest control (b004)	
				5. Describe the factors in the selection & application of insecticides (b005)	
				6. Identify safety guidelines for insecticide use (b006)	
				7. Outline an IPM plan (b007)	
				Other:	

3	2	1	N	N. Hand Tools	Notes:
				1. Identify common hand tools used in woodworking	
				2. Identify common hand tools used in metalworking	
				Other:	

3	2	1	N	O. Power Tools	Notes:
				1. Analyze the uses and safety procedures of common power tools used in woodworking	
				2. Analyze the uses and safety procedures of common power tools used in metalworking	
				Other:	

3	2	1	N	P. Woodworking	Notes:
				1. Demonstrate the use of common measuring and layout tools used in woodworking	
				2. Demonstrate the use of common handsaws and power saws used in woodworking	
				3. Demonstrate the use of common handheld tools used to bore and drill in wood	

				4. Demonstrate the use of common fasteners used in woodworking	
				Other:	

3	2	1	N	Q. Tool Sharpening and Reconditioning	Notes:
				1. Describe the procedures for reconditioning and sharpening common hand tools	
				2. Recondition a center punch	
				3. Sharpen a cold chisel	
				4. Recondition a screwdriver	
				Other:	

3	2	1	N	R. Arc Welding	Notes:
				1. Identify basic safety and maintenance procedures for arc welding	
				2. Identify the major parts of a shielded metal arc welder	
				3. Describe how a shielded metal arc welder works	
				4. Demonstrate striking an arc	
				5. Demonstrate welding common joints	
				Other:	

3	2	1	N	S. Oxyfuel Cutting	Notes:
				1. Identify safety procedures for cutting with oxyfuel	
				2. Describe the procedures for cutting with oxyfuel	
				3. Demonstrate the procedures for cutting with oxyfuel	
				Other:	

3	2	1	N	T. Painting and Finishing	Notes:
				1. Identify the safety procedures for painting	
				2. Demonstrate the procedures for applying paint with a paintbrush	
				Other:	